AMENDMENTS TO THE CLAIMS

Claims 1-5 (Cancelled)

Claim 6. (original) A method of making a replacement device, comprising the steps of:

forming a model of a distal end of a patient's femur;

forming a first mold from the model, wherein the first mold has a bottom side that substantially matches the trochlear groove of the patient's femur, wherein the first mold has a top side opposite of the bottom side;

coupling a peg on a predetermined location on the bottom side of the first mold;

shaping the top side of the mold to substantially track the trochlear groove of the patient's femur;

forming a second mold from the first mold; and

pouring viscous material into the second mold to make a replacement device.

Claim 7. (original) A method according to Claim 6, further comprising the steps of:

streamlining the edges of the replacement device.

Claim 8. (original) A method according to Claim 6, further comprising the steps of:

shaping the replacement device to have an oval shape defined by first, second, third, and fourth boundary conditions, wherein:

the first boundary condition being approximately 3 mm to 5 mm from the attachment of an anterior cruciate ligament to the femur;

the second boundary condition being approximately at least near the superior edge of an end of a natural cartilage of the femur;

the third boundary condition being approximately at the top ridge of a right condyle of the femur; and

the fourth boundary condition being approximately at the top ridge of a left condyle of the femur.

Claim 9. (original) A method according to Claim 6, further comprising the steps of:

shaping the top surface of the replacement device to have a substantially similar thickness between the top and bottom surfaces, wherein the thickness is approximately between 2 mm and 6 mm.

Claim 10. (original) A method according to Claim 6, further including the steps of:

taking a predetermined number of sliced images along the distal end of a patient's femur;

transposing each of the predetermined number of sliced images into a plate;

cutting the sliced images from each of the plates;

assembling each of the plates to define outer edges of the distal end of the femur; and

applying filler over the outer edges to form the model of the distal end of the femur.

Claim 11. (Previously amended) A method of forming a replacement device and a marking template device from a single mold, comprising the steps of:

forming a model of patient's distal end of a femur;

forming a first mold from the model, wherein the first mold has a back side that matches the trochlear groove of the femur, wherein the first mold has a face side

opposite of the back side;

shaping the face side of the first mold to substantially track the trochlear groove of the femur;

forming a second mold from the first mold; and

pouring a first viscous material into the second mold to make a replacement device.

Claim 12. (Currently Amended) A method according to Claim 11, further including the steps of:

coupling a peg to the back side of the first mold at a predetermined ~~20~~ location;

removing the peg from the back side of the first mold;

forming a third mold from the first mold without the peg on the back side; and

pouring a second viscous material into the third mold to make a marking ~~25~~ template.

Claim 13. (original) A method according to Claim 11, further including the steps of:

forming an opening through the first mold along the predetermined location.

Claim 14. (original) A method according to Claim 11, wherein the first viscous material and second viscous material is the same material.

Claim 15. (currently amended) A method according to Claim 11, wherein the step for forming the model of patients distal end of the femur further includes the steps of:

compiling in a computer a CT image data of the patient's distal end of the femur;

creating a surface of the patients distal end of the femur; and

driving a computer assisted machine system to machine the model of ~~10~~ patient's distal end of the femur.

Claims 16-19 (Cancelled)